MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

September 3, 2014

TO: Unit Managers, District Supervisors, Forest Planners, Timber Management Specialists, David Price, Dave Neumann, Dennis Nezich; Forest Resources Division
Doug Reeves, Wildlife Division

FROM: Debbie Begalle, Forest Planning & Operations Manager
Forest Resources Division

SUBJECT: Clarification of Within-Stand Retention Guidance for Aspen Stands

Aspen retention was identified as an opportunity for improvement during the 2012 external surveillance audit, per an observation issued by our FSC auditor and became a minor CAR (FSC 2013.1) last fall. There were two parts to the minor CAR:

1. *"Aspen retained along timber sale boundaries for the purposes of maintaining a representative portion of a stand could be confused as being part of an adjacent stand or compartment that was not recently harvested. MDNR therefore risks losing this under-represented successional stage of aspen in the FMU (Indicator 6.3.a.1)."*

2. *"Most areas include retention of trees representative of dominant species, with the exception of aspen harvests, where larger sized aspens are either not retained or are retained at harvest unit edges where they risk being taken during the harvest of an adjacent compartment/ stand. While MDNR included a discussion of options for retention based on species composition, dominance, opening size and other factors, incorporation of these retention options into MDNR guidelines for all districts was not completed by the time of the 2013 audit."*

Bullet 1 above has been addressed by means of an e-mail from Brian Maki on June 24, 2014, with the subject matter "*Documenting Long Term (Area) Retention in Harvests on State Forest Lands.*" Instructions can also be found in Work Instruction 1.4 and Appendices C and P of the IFMAP Manual.

Relative to the second bullet above, some staff already use patch retention in aspen stands. *The Within Stand Retention Guidance IC 4110 (Rev. 01/27/2012)* (Guidance) encourages use of area-based retention, using single or multiple patches, individual

trees or both. The Guidance clarifies that use of area based retention should result in a greater tendency to use patch retention rather than individual stems.

While there is some benefit to use a variety of methods for meeting within-stand retention, retention of patches of mature aspen should be used when possible in aspen harvests for the following reasons:

- Patch retention can facilitate greater longevity of the retained live trees, since scattered individual trees tend to windthrow more easily.
- Snags and coarse woody debris (CWD) may last longer in patches where it may not get skidded over during harvesting.
- Effects of edge, shading and hormonal suppression on aspen sucker density can be minimized by retaining aspen in patches vs. the equivalent amount of scattered individual trees.
- Greater representation of mature aspen as a component of retention is more likely if patches are used vs. scattered individual trees.
- Retention of patches of mature aspen within harvest units may help satisfy the FSC Indicator 6.3.a.1 "*the forest owner or manager maintains, enhances, or restores unrepresented successional stages… that would naturally occur on the FMU."* In this case, the FSC auditors appear to specifically be looking for retention of mature aspen.
- Retention of patches can help enhance within-stand structural complexity for a greater length of time as the stand regenerates, relative to scattered individual trees.

In aspen cover types, retention should include **representation of mature aspen** stems, in addition to any other species selected for retention. Per the note above, that was not what was observed on several timber sale areas that were audited. The *Within Stand Retention Guidance* specifies in Section 4) A. 2 that retained trees should be representative of the dominant species naturally found on the site, and that retention of mature aspen stems has value for improving structural habitat and future cavity trees in Section 6. D. The citation of Indicator 6.3.a.1 by the auditors in their observation of the value of retaining patches of mature aspen also reinforces this practice. Indicator 6.3.a.1 requires forest managers to maintain, enhance or restore under represented successional stages; when cited in reference to aspen, it implies that the auditors would like to see greater retention of mature aspen components or patches in the landscape at the stand level.

Field staff should continue to use professional judgment to determine when retention of mature aspen in patches vs. scattered trees is the silviculturally and managerially appropriate choice. The Guidance also specifies that 'no retention' or retention of less than 3% of stand area may also be acceptable in special cases where less retention can be justified, e.g., for reasons including forest health, wildlife habitat requirements, small stand size or narrow width, safety, cover type conversion, or silvicultural rationale.

To clarify, aspen stands less than 10 acres in size, or narrower than 200 feet, would generally fit ‘too small,’ or ‘too narrow’. Aspen stands larger than this should generally have other justification for no retention. Justification for ‘no retention’ and retention of less than 3% must be documented in the inventory comments for each stand.

As harvest prescriptions are prepared and implemented, please ensure the guidelines are being followed.

Please forward to field staff as appropriate. If you or your staff has any questions, please feel free to contact Dave Neumann, Silviculturist, Lansing office, or the appropriate District Timber Management Specialist.